

From compliance to adherence to concordance

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OUTLINE

1. Compliance to adherence and on to concordance
2. Barriers to patients
3. Why patients do “different “ regimens
 - Identifying those differences
 - Matching interventions to types of differences
 - Matching therapies to patient goals and beliefs
4. Common challenges in asthma and COPD
 - Inhalers
 - Expectations
5. Summary

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DEFINITIONS

Compliance: The extent to which a patient follows medical instructions regarding a treatment regimen.

- poor compliance = conscious decision not to follow clinician's orders
- patient has passive role in health management
- decision-making is left to the clinician

Adherence: The degree of similarity between the clinician's recommended therapy and the patient's actual behavior.

- poor adherence indicates need to problem solve
- patient has an active role in consenting to & following prescribed treatment
- decision-making is shared

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Concordance

The clinician and the patient and family help determine goals and what therapies might meet those goals.

- Patient and family help decide if the needs are being met. This is patient-center, not therapy-centered.
- Requires negotiation on needs from perspective of clinician and perspective of patient and family
- Patient acknowledges consequences of actions if they chose to take the "easy" or convenient approach. The clinician also realizes the consequences of their recommendations on the patient.

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Barriers to Patients

Patient Factors: cultural beliefs, attitudes to drug therapy, fears of side effects or developing a “tolerance”

Disease-related: co-morbidities, age, severity

Treatment issues: multiple meds, cost , timing

Health Care Clinician: not recognizing complexity of medication regimen (integrating care), lack of awareness of value of collaborative self management, inadequate knowledge of teaching methods

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Barriers to COPD Patients

Patient Factors: cognition, depression, anxiety & normal age-related (motor skills, vision, hearing)

Disease-related: slow subjective response to inhaled meds, exacerbations of COPD

Treatment issues: multiple medications (average of 6 medications in COPD), complexity of inhalers

Health Care Provider: minimizing the importance of inhaler education

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Cognitive Function in COPD

- Cognitive issues in 77% of COPD pts who were hypoxemic (Grant 1982)
- COPD pts. score lower in tests of immediate verbal memory & long term memory and verbal learning than those of similar age (70 yo) and elderly (Incalzi 1997)

Dodd JW et al. Cognitive Function in COPD ERJ 2010

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Barriers to Asthma Patients

- Patient Factors: young age (motor skills), reliance on parents and school personnel, cognition, developmental stage, adolescence
- Disease-related: acceptance of symptoms as “normal” , acute disease model
- Treatment issues: multiple medications, not having easy access, using in public, poor inhaler technique, sharing meds, complexity of inhalers
- Health Care Clinician: minimizing the importance of inhaler education, talking to wrong person---the parent

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Why are patients not adherent?

An apparently irrational act of non-adherence (from a physician or provider's point of view) may be a very rational action when seen from a patient's point of view.

Courtesy, S Bartlett
PhD

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Types of Adherence

- Erratic
- Unwitting
- “Intelligent”

Rand CS, in The Science of Self-Report
1999.

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Erratic Adherence

The patient understands and agrees with therapy, but has difficulty consistently maintaining the regimen.

Causes:

- forgetful or disorganized
- complex medication regimen that doesn't match their lifestyle (2 inhalations qid, "wait" 5 to 10 minutes between inhalations)
- changing schedule (sleep late, change shifts, school and school activities)
- run out of medicine

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Matching adherence interventions to the source of non-adherence

**Erratic
Non-adherence**



- Behavioral strategies such as cueing, using a reminder system
- Simplify & tailor regimen to patient's lifestyle

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Unwitting Non-Adherence

Patient and clinician mistakenly believe that the patient is adhering.

Causes:

- Misunderstands regimen (as needed or daily)
- Forgets instructions
- Language barrier (may “hear” what is said but doesn’t understand)
- Cultural differences (medication use may not be culturally acceptable)
- No one in office asks them

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Interventions for Unwitting Non-adherence

**Unwitting
Non-adherence**



- Review their therapy use in non-confrontational way
- Explore reason for non-adherence
- Provide written or visual medication plans
- Modify regimen

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“Intelligent” Non-Adherence

The patient deliberately alters or discontinues therapy.

Causes:

- “Feeling better”, don’t need the medication
- Concerns about toxicity
- Perceived ineffectiveness of therapy
- Fear of developing a “tolerance” to the medication
- Philosophy that “less medicine is best medicine”
- Failure to link actions and consequences

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Interventions for Intelligent Non-adherence

“Intelligent”
Non-adherence



- Patient education & counseling
- “Negotiate” therapy
- Link therapy with their personal goals
- Active listening (not talking)

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Clinical Skills to Improve Adherence

- Direct evaluation: *Which meds have you been able to take in the past month? How often? Any side effects?*
- Nonjudgmental probing: *Sometimes people have trouble remembering to take this medication twice a day, do you have difficulty taking it that often?*
- Inquire about barriers: *Are you having difficulty affording these medications? Do you have problems getting your refills on time?*

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Common Challenge: Inhalers



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Inhalers are complex!

- time needed to educate patients about inhalers is considerably more than we spend
- devices are usually tested in asthmatics (tiotropium the major exception)
- unlike the “real world” of inhaler use, patients in trials receive dedicated training
 - 70-90% adherence in trials*
 - < 50% adherence in “real life”

*Breekveldt-Postma 2004, Haupt 2008, Kringsman 2008

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...and then there are the instructions!

Twisthaler (Asmanex)	Turbuhaler (Pulmicort)	Handihaler (Spiriva)	Diskus (Advair)
twist counter clockwise to remove cap	twist grip as far as possible in one direction	open packet with capsule	slide lever until it clicks
align arrow with counter	twist grip back until it clicks	open mouthpiece by lifting ridge	
place cap on & turn clockwise		place capsule in center hole of HandiHaler	
		close the mouthpiece	
		press buttons on sides once	

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HFA's are great for the environment but... the priming requirements...

Inhaler

No. & frequency of priming

Advair HFA™	4 new & if not used >4 wks or dropped
Azmacort™	2 new & not used 3 days
Combivent™CFC	3 new & not used 24 hrs
Flovent HFA™	4 new & not used >7 days
Proventil/Ventolin™	4 new & not used 14 days/or dropped
Qvar™	2 new & not used 10 days
Symbicort HFA™	2 new & not used 7 days or dropped
Xopenex™	4 new & not used 3 days

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The Bottom Line... Inhalers & Adherence

Control of symptoms of asthma and COPD relies on optimal treatment with inhaled medication.

Non-adherence will result in suboptimal control of asthma or COPD.

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Improving Adherence to Inhalers

Erratic non-adherence

Unwitting

Intelligent

- Place inhalers near coffee pot or toothbrush; set cell phone alarm; change inhaler to similar delivery device (e.g. all MDI's)
- Explore barriers (cultural or language); determine what works best for them (self-written notes, videos, pictures etc)
- Discuss specifics of non-adherence (fears of toxicity? tolerance?); clarify pre-conceived notions, explore symptom control

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A= Activities
P= Persistent
G= triggers
M= Asthma medications
R= Response to therapy

APGAR PLUS

P= Asthma Plan
L= Lung function
U= Use of inhaler
S= Steroids

Please circle your answers:

A 1. In the past 2 weeks, how many times did any breathing problems (such as asthma) interfere with your ACTIVITIES or activities you wanted to do?
 Never 1 - 2 times 3 or more times

P 2. How many DAYS in the past 2 weeks did you have shortness of breath, wheezing, chest tightness, cough or felt you should use your rescue inhaler?
 None 1 - 2 DAYS 3 or more DAYS

3. How many NIGHTS in the past 2 weeks did you wake up or have trouble sleeping due to coughing, shortness of breath, wheezing, chest tightness or get up to use your rescue medication?
 None 1 - 2 NIGHTS 3 or more NIGHTS

G 4. Do you know what makes your breathing problems or asthma worse?
 Yes No Unsure

- Please circle things that make your breathing problems or asthma worse:
 Cigarettes Smoke Cold Air Colds Exercise Dust Dust Mites
 Trees Flowers Cats Dogs Mold Other: _____
- Can you avoid the things that make your breathing problems or asthma worse?
 Seldom Sometimes Most of the time

A 5. List or describe medications you've taken for breathing problems or asthma in the past 2 weeks: Remember you may use Nasal, Oral, or Inhaler medications.

Breathing or Asthma Medication	When taken?	Reasons for taking medication:	Reasons for not taking medication:
	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		
	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		
	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		
	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		

R 6. When I use my breathing or asthma medicines I feel:

A= Activities
P= Persistent
G= triGgers
A= Asthma medications
R= Response to therapy

COPD

P= Asthma Plan
L= Lung function
U= Use of inhaler
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	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		
	<input type="checkbox"/> Daily <input type="checkbox"/> As needed		

R 6. When I use my breathing or asthma medicines I feel:
 Worse No Different A Little Better A Lot Better

Summary

- Taking the time to explore non-adherence (or the patient's potential for non-adherence), is an important investment for our patients
- Non-adherence to inhalers affects symptom control
- Need new mind set of concordance between patient, family and clinicians
- Tools can make this easier
 - For assessing adherence
 - For assessing inhaler technique

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Conclusions:

- Concordance is critical
- Concordance is a team effort
- Care goes better with concordance